

A. Permit Certificate

J.R. SIMPLOT CO. -- ABERDEEN PLANT

WASTEWATER-LAND APPLICATION PERMIT

LA-000031-03

THE J.R. SIMPLOT COMPANY LOCATED AT ABERDEEN, IDAHO AND IN TOWNSHIP 5 SOUTH, RANGE 31 EAST; PARTS OF SECTIONS 27 and 34; TOWNSHIP 5 SOUTH, RANGE 31 EAST, PART OF SECTIONS 35; TOWNSHIP 5 SOUTH, RANGE 31 EAST, ALL OF SECTION 6, PARTS OF SECTIONS 5, 7 and 8; TOWNSHIP 5 SOUTH, RANGE 30 EAST, PARTS OF SECTIONS 1 and 12; IS HEREBY AUTHORIZED TO CONSTRUCT, INSTALL AND OPERATE A WASTEWATER-LAND APPLICATION TREATMENT SYSTEM IN ACCORDANCE WITH THE WASTEWATER-LAND APPLICATION PERMIT REGULATIONS (IDAPA 58.01.17), THE WATER QUALITY STANDARDS AND WASTEWATER TREATMENT REQUIREMENTS (IDAPA 58.01.02), THE GROUND WATER RULE (IDAPA 58.01.11), AND ACCOMPANYING PERMIT APPENDICES AND ATTACHMENTS. THIS PERMIT IS EFFECTIVE FROM THE DATE OF SIGNATURE AND EXPIRES ON 19th JUNE 2010



MARK DIETRICH,
REGIONAL ADMINISTRATOR
STATE OF IDAHO
DEPARTMENT OF ENVIRONMENTAL QUALITY
POCATELLO REGIONAL OFFICE

SIGNED THIS 20th DAY OF JUNE 19 2005

IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY
Pocatello Regional Office
444 Hospital Way #300
Pocatello ID 83201

POSTING ON SITE RECOMMENDED

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1. Reference Documents

1. Plan of Operation
2. Odor Management Plan
3. Sampling and Analysis Plan
4. Water Quality Improvement Plan
5. Waste Solids Management Plan

Reference Documents listed on this page require approval by the Department. This permit does not relieve the **J.R. Simplot Company**, hereafter referred to as the Permittee, from responsibility for compliance with other applicable federal, state or local laws, rules, standards or ordinances.

C. Abbreviations-Definitions

Table C-1 Definitions

TERM OR ACRONYM	DEFINITION/EXPLANATION
Ac-in	Ac-in = volume of water covering 1 acre of land to a depth of 1 inch -- equal to 27,150 gallons
COD	Chemical Oxygen Demand
DEQ or the Department	the Department of Environmental Quality
Director	Administrator of the Department of Environmental Quality; references to the Director also include the Director's Designee
EC	Electrical conductivity
ET	Evapotranspiration
GS	Growing Season – April 1 through October 31
Handbook	Handbook for Land Application of Municipal and Industrial Wastewater, DEQ, April 1996
HLR _{NGS}	Hydraulic Loading Rate during the non-growing season
HMU	Hydraulic Management Unit
IDAPA	Idaho Administrative Procedures Act
lb/ac-d	Pounds (of constituent) per acre per day
MG	Million Gallons
MGA	Million Gallons Annually
mL	Milliliter
NGS	Non-growing season – November 1 through March 31
NVDS	Non volatile dissolved solids (Total dissolved solids less volatile dissolved solids)
Operating year	Begins with the non-growing season and extends through the growing season of the following year (November 1 – October 31).
PO	Plan of Operation – required for all permitted wastewater land application facilities pursuant to IDAPA 58.01.17.300.06
SAR	Sodium Absorption Ratio
SIW	Supplemental irrigation water
SMU	Soil monitoring unit
SWL	Static Water Level
TDS	Total dissolved solids
TDIS	Total dissolved inorganic solids
TKN	Total Kjeldahl nitrogen – the sum of organic nitrogen and ammonia nitrogen
Typical crop uptake	The <u>median</u> crop nutrient uptake from the last three (3) years for each HMU. For HMU's having less than three years of crop uptake data, best estimates or values from standard crop production tables can be used on (an interim basis).
VDS	Volatile dissolved solids
WLAP	Wastewater Land Application Permit (or Program)
WW	Wastewater

D. Facility Information

Table D-1 Facility Information

Permitted Facility Information		
Type of Waste	Potato Processing Wastewater	
Method of Treatment	Slow Rate Land Treatment	
Irrigated Acres	1272 irrigated acres in three (3) locations: Original Site, Knudsen Site and Pratt Site	
Type of Facility	French Fry Potato Processing Facility	
Domestic Sewage System	City of Aberdeen POTW (Plant location)	
Potable Water Supply	In-plant Potable Water Supply Well(s)	
Facility Location	Aberdeen, Idaho	
Legal Locations	Original Location: T5S, R31E; Parts of Sections 27 & 34 Knudsen Location: T5S, R31E; Part of Section 35 Pratt Location: T5S, R31E; All of Section 6, Parts of Sections 5, 7, & 8 T5S, R30E; Parts of Sections 1 & 12	
County	Bingham	
USGS Quads	Aberdeen, Coffee Point SW, Big Fill Reservoir, American Falls NW	
Soils on Site	<u>Original + Knudsen Locations</u>	<u>Pratt Location</u>
(Soil mapping units listed represent the entire sites, not just mapping units directly under irrigation.)	Blackfoot Loam Declo Fine Sandy Loam Declo loam (0 – 8% slopes) Portino silt loam (0 – 4% slopes) Thornock extremely stony loam, undulating Waycup Extremely Stony Loam, (0 to 12% slopes)	Declo Loam (0-2% Slopes) Kimama Silt Loam Lava Rock Land Polatis Stony Silt Loam (2-4% slopes) Portino Silt Loam (0-8% slopes) Portino Stony Silt Loam (2-8% slopes) Portino-Knull Silt Loams (0-4% slopes) Portneuf Silt Loam (0-12% slopes) Thornock Extremely Stony Loam, undulating Thornock Stony Loam (0-4% slopes)
Depth to Ground Water	Original + Knudsen site: 20 – 40 feet Pratt: 55 – 180 feet	
Beneficial Uses of Ground Water	Agriculture, Industrial, Domestic	
Nearest Surface Water	Hazard Creek, several irrigation canals on and adjacent to properties	
Beneficial Uses of Surface Water	Agriculture, Aquatic Biota	

Permitted Facility Information

Facility Contacts	Bruce Hauber, Unit Director Kirk Adkins, Environmental Manager	PO Box 460, 624 Simplot Loop Aberdeen, ID 83210 208-397-4121/208-397-2542 (fax)
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E. Compliance Schedule For Required Activities

- E.1 The Permittee shall complete activities required in Table E-1 on or before the Completion Date unless the Department approves an alternative date in writing. Where the required submittal is a work plan or schedule for improvements to the wastewater land application system, the Department will respond with any comments, questions or requests for further information within thirty (30) days of receipt of the submittal. If the Department requests further information, the Permittee shall respond within thirty (30) days of the Department's request. The above-described review process will repeat until necessary modifications to the work plan or schedule are completed by the Permittee and approved by the Department. If the Permittee fails to submit an approveable document, as determined by the Department, within one-hundred and twenty (120) days past the original submittal due date, the Permittee may be deemed to be in violation of this permit.
- E.2 If any event occurs that may delay the performance of any requirement specified in this permit, the Permittee shall notify the Department in writing within ten (10) days of the date the Permittee knew, or should reasonably have known, of the event. The notice under this paragraph shall describe the anticipated consequences of the delay, measures taken by the Permittee to prevent or minimize the delay, and a schedule by which those measures will be implemented. The Permittee shall utilize all reasonable measures to avoid or minimize delays. If the Department determines that the delay, or anticipated delay, in achievement of any requirement of the permit arises from causes beyond the control of the Permittee (a *force majeure* event), the time for performance of the requirement that is affected by the *force majeure* event will be extended by the Department for such time as the Department determines necessary to complete that requirement. The Department may pursue appropriate enforcement with respect to any delay that does not arise from a *force majeure* event.
- E.3 Once approved by the Department, the Sampling & Analysis Plan, the Odor Management Plan and the Waste Solids Management Plan shall be incorporated by reference into and enforceable as part of the Permit. All other plans that are required to be submitted to and approved by the Department pursuant to Section E, Table E-1 shall be, once approved, implemented by the Permittee, but shall not be enforceable as part of the Permit.
- E.4 The Permittee may submit revised management plans required in CA-031-01 through CA-031-03 as individual documents or as sub-parts incorporated into a comprehensive, system-wide Plan of Operation.

Table E-1 Compliance Schedule for Required Activities

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COMPLIANCE REQUIREMENT NUMBER	COMPLIANCE REQUIREMENT DESCRIPTION
COMPLETION DATE	
CA-031-01 Six (6) months following permit issuance	The Permittee shall update the existing Plan of Operation (PO) to incorporate new or modified O&M requirements consequent to initiating land application at the Pratt expansion.
CA-031-02 Six (6) months following permit issuance	<ol style="list-style-type: none"> 1) The Permittee shall update the following management plans to reflect new or modified O&M requirements consequent to initiating land application at the Pratt expansion: <ol style="list-style-type: none"> a) Odor Management Plan (OMP). The updated nuisance management plan must describe typical and expected causes of nuisance conditions and associated management or operational strategies intended to minimize or prevent such conditions. b) Waste Solids Management Plan (WSMP). The plan shall address the management of all waste solids associated with wastewater treatment processes to demonstrate that requirements in Section I, Paragraph 5 are being fulfilled.
CA-031-03 1) (a) and (b) Six (6) Months After Permit Issuance 1) (c) Eighteen (18) Months after Permit Issuance 1) (d) Twenty-four (24) Months after Permit Issuance 2) Eighteen (18) Months after Permit Issuance	<ol style="list-style-type: none"> 1) The Permittee shall submit a Sampling & Analysis Plan (SAP) that includes: <ol style="list-style-type: none"> a) A comprehensive description of environmental sampling and analysis procedures (including those necessary for conducting all sampling and monitoring required in Table G-1); b) Detailed quality control/quality assurance provisions; c) A monitoring well network evaluation that determines whether additional monitoring points, ground water quality data or aquifer characterization are required to characterize up- and down-gradient ground water conditions at the Pratt expansion location; d) A Monitoring Well Statistics Plan (MWSP) demonstrating that the SAP for the Original, Knudsen and Pratt locations is adequate to detect and quantify impacts to ground water as a result of the land application of wastewater; 2) The Permittee shall construct additional monitoring wells as necessary according to the schedule specified in (1) c) above.
CA-31-04 Twenty-four (24) months after Permit Issuance	<ol style="list-style-type: none"> 1) The Permittee shall submit a final Water Quality Improvement Plan (for the Original and Knudsen locations) that incorporates information and recommendations in the following technical submittals: <ol style="list-style-type: none"> a) Final Site Management Plan dated July 1, 2003, b) Ground Water Investigation Report (January 25, 2002) and the addendum (January 16, 2003) c) Well Location Acceptability Analysis (submitted January 30, 1997)

¹ "Steady-state" refers to that point in time, considering known or estimated aquifer characteristics and contaminant fate and transport mechanisms, when ground water quality fully reflects improvements to the Permittee's wastewater treatment system (addition of the Pratt location and any other in-plant treatment improvements).

² If ground water quality levels for any regulated constituent at downgradient points of compliance are predicted to exceed those at the statistically related upgradient monitoring point, the Permittee will be required to propose site-specific ground water quality levels pursuant to provisions in IDAPA 58.01.11.400.

COMPLIANCE REQUIREMENT NUMBER	COMPLIANCE REQUIREMENT DESCRIPTION
COMPLETION DATE	
	2) The WQIP shall: <ul style="list-style-type: none"> a) establish timelines during which water quality will improve to a “steady-state”¹ as a result of improvements to the wastewater-land application system, and b) predict site-specific ground water quality levels down-gradient from the Original and Knudsen locations when the treatment system is at steady-state².

F. Permit Limits and Conditions

Section F Notes

- F.1 The Permittee is allowed to apply wastewater and treat it on a land application site as prescribed in the table below and in accordance with all other applicable permit conditions and schedules.
- F.2 Hydraulic and Soil Management Units, indicated with an asterisk in Tables K-1 and K-4 respectively, represent pivots “*yet-to-be-developed*” at the Pratt location and are included herein for informational purposes only. Following development, the Permittee may use these pivots for wastewater-land application only with prior, written approval from the Department.

Table F-1 Site-Specific Permit Conditions

CATEGORY	PERMITTED CONDITIONS	
Type of Wastewater	Potato Processing Wastewater	
Application Site Areas	Original	259.7 Acres
	Knudsen	183.3 Acres
	Pratt	850.5 Acres (Phase I) (see Section F note F-2)
Application Season	Original	Year Round
	Knudsen ¹	GS (NGS only under emergency conditions specified in the Plan of Operation)
Application Season	Pratt ²	GS; NGS until frozen ground prevents infiltration (Pump-back pivots – Year-round)
Method of Treatment and Process	In-plant treatment including some or all of the following components at a given	

¹ The Knudsen location may receive hydraulic applications during time periods *other* than listed in Table F-1 *only* under emergency conditions as described in the Plan of Operation.

² Management Units MU-003126 (CP-5P) and MU-003127 (CP-6P) are designated as “Pump-back” pivots by the Permittee. The pump-back system is designed as a means of surface water run-on/run-off control to minimize the potential for off-site movement of wastewater. See also Section Note F-6.

CATEGORY	PERMITTED CONDITIONS	
Description	point in time: anaerobic digestion (beginning approximately December 30, 2005); primary clarification; fat, oil & grease separation; land application for beneficial re-use	
Maximum Wastewater Hydraulic Loading Rate: Growing Season (GS)	See Table F-2 GS & NGS Hydraulic Loading Limits & Table F-3 <u>Transitional</u> GS & NGS WW Hydraulic and Constituent Loading Limits	
Maximum Wastewater Hydraulic Loading Rate: Non- Growing Season (NGS)	See Table F-2 GS & NGS Hydraulic Loading Limits & Table F-3 <u>Transitional</u> GS & NGS WW Hydraulic and Constituent Loading Limits	
COD Loading ³ (GS and NGS) (each HMU)	50 lb/ac-day Seasonal Average (GS and NGS)	
Annual NVDS Loading ⁴ (WW only) (each HMU)	4800 lb/ac-year from wastewater	
Annual Nitrogen Loading (each HMU)	Original & Pratt sites	350 lb/ac-year
	Knudsen site	100 lb/acre-year
Buffer Zones	See Table F-4 Buffer Zone Requirements	
Grazing	Grazing is allowed only with prior Department approval of a Grazing Management Plan	
Ground Water	<p>Ground water quality shall comply with the Ground Water Quality Rule (GWQR), IDAPA 58.01.11, except as noted below.</p> <p>For those areas and constituents identified in the ground water investigation report (Report) as being degraded or in exceedance of standards, the Permittee's compliance with the requirements of Section E, Compliance Schedule for Required Activities, (CA-31-04), shall demonstrate GWQR compliance.</p>	

F.3 Table F-2 establishes specific limits for growing season (GS) and non-growing season (NGS) wastewater hydraulic loading for each hydraulic management unit.

Table F-2 GS and NGS Wastewater Hydraulic Loading Limits for specific Hydraulic Management Units

	WLAP Serial Number	Simplot-Aberdeen ID	GS Hydraulic Loading Limit (in)	NGS Hydraulic Loading Limit (in)
Original Area	MU-003109	CP-3	3.6	9.0
	MU-003117	CP-8	3.6	9.0

³ COD loading is calculated as the mass of COD applied during the GS or NGS to a given HMU divided by the number of acres in the HMU and by the number of days in the respective season. This result is compared to the permit limit to determine permit compliance.

⁴ Non-volatile dissolved solids (NVDS) is calculated as total dissolved solids (TDS) less volatile dissolved solids (VDS). NVDS loading is calculated as the mass of NVDS applied to a given HMU divided by the number of acres in the HMU and by the number of days of operation in the operating year. This result is compared to the permit limit to determine permit compliance.

	WLAP Serial Number	Simplot-Aberdeen ID	GS Hydraulic Loading Limit (in)	NGS Hydraulic Loading Limit (in)
	MU-003118	CP-9a, CP-9b	3.6	9.0
	MU-003119	CP-10a, CP-10b	3.6	9.0
	MU-003120	Corners North	3.6	9.0
	MU-003121	Corners South	3.6	9.0
Knudsen Area	MU-003114	CP-5	3.6	1.5 ⁵
	MU-003115	CP-6	3.6	1.5 ⁵
	MU-003116	CP-7	3.6	1.5 ⁵
Pratt Area	MU-003122	CP-1P	10.5	3.8
	MU-003123	CP-2P	10.5	5.0
	MU-003124	CP-3P	10.5	5.7
	MU-003125	CP-4P	10.5	5.4
	MU-003126	CP-5P	10.5	5.4
	MU-003127	CP-6P	10.5	5.4
	MU-003128	CP-7P	10.5	5.5

⁵ NGS loading limits are given for the Knudsen site but are applicable only under emergency conditions to be described in the Plan of Operation. See section F, footnote 3.

F.4 Hydraulic and constituent loading limits provided in Table F-3 are allowed on a transitional basis in accordance with the Consent Order originally executed between IDEQ and the J.R. Simplot Co. on May 28, 2002 and amended on April 25, 2003 and on November 3, 2003. Timelines and limits provided in Table F-3 are allowed so long as the J.R. Simplot Co. is in compliance with the terms and conditions of the Consent Order. If the Permittee violates any requirement of the Consent Order, hydraulic and constituent loading limits shall immediately default to those given in Tables F-1 & F-2.

Table F-3 TRANSITIONAL GS and NGS Hydraulic Loading Limits for specific Hydraulic Loading Limits

Hydraulic/Constituent Loading Components ¹	From Permit Issuance to October 31, 2004 <u>or</u> until the Pratt expansion comes on-line, whichever occurs first.	
	Original Area (see Table K-1)	Knudsen Area (see Table K-1)
Nitrogen Loading (lb/ac-year)	850	375
WW Loading – Total (MGA)	176.7	54.7
WW Loading – Total (in/ac-yr)	25.1	11
WW Loading – GS (MG)	114	35.5
WW Loading – GS (in)	16.2	7.1
WW Loading – NGS (MG)	62.6	19.5
WW Loading – NGS (in)	8.9	3.9
NVDS Loading (lb/ac-yr)	6500	2850
COD Loading (lb/ac-day)	51.5	22.7
¹ Based on the application of WW at a rate to result in 850 lb/ac-year of nitrogen applied on the Original acreage and distributing the remainder of the wastewater to the Knudsen location. WW generation rate = 702,000 gallons/day over a 330 operating campaign.		

- F.5 Buffer zones separating features of interest from land application areas shall be provided as required in Table F-4 Buffer Zone Requirements and as indicated on the attached maps. .
- F.6 Notwithstanding any other provision of this permit, including without limitation the buffer zones set forth herein, the Permittee shall comply with the following: 1) wastewater applied by the Permittee shall be restricted to the premises of the land application site, and 2) the Permittee shall not discharge wastewater to surface waters of the state, without first obtaining all permits and other authorizations required by state and federal law.

Table F-4 Buffer Zone Requirements

Feature of Interest	Required Buffer Distance (feet)	Alternative Buffer Distance (feet)
Dwellings	300	100 (a)
Public access areas	50	0 (b)
Natural surface water bodies	100	0 (b)
Man-made irrigation conveyances	50	0 (b)

(a) An alternative distance of 100 ft is allowed in those areas indicated on the attached maps.

(b) If approved by the Department in writing, an alternative distance less than 50 ft is allowed in those areas where physical barriers are identified on the attached maps. An alternative distance approved by the Department in writing shall be enforceable as part of this permit.

G. Monitoring Requirements

Section G Notes

- G.1 The Permittee shall sample and analyze for parameters as given in Table G-1 (Facility Monitoring) in this section¹.
- G.2 Following two (2) years of operation under this permit, the Permittee may petition the Department for a waiver or modification of sampling requirements listed in Table G-1. The Department may modify sampling requirements if the following conditions are met;
- 1) the Permittee has determined that information obtained from a particular sampling parameter or required interval is not providing data necessary for site operation or management,
 - 2) the Permittee has compiled and analyzed empirical data sufficient to validate that the performance of the wastewater-land treatment system can be accurately monitored using a less rigorous environmental sampling regimen, and
 - 3) the Permittee has submitted, for Department review and approval, a written proposal for an alternative sampling regimen.
- G.3 Samples shall be collected at times and locations that represent typical environmental and/or process conditions.
- G.4 The Permittee shall use appropriate analytical methods, as given in the *1994 Technical Interpretive Supplement*, or as approved by the Department.
- G.5 A description of approved sample collection methods, appropriate analytical methods and companion QA/QC protocol shall be included in the facility's Plan of Operation.
- G.6 Unless otherwise agreed to in writing by the Department, data collected and submitted shall include, but not be limited to, the parameters and frequencies in the Facility Monitoring Table.

¹ Except for lysimeter sampling and analysis for which monthly monitoring is recommended but not required.

- G.7 Ground Water Monitoring Procedure: Ground water monitoring wells shall be purged a minimum of three (3) casing volumes and/or until field measurements of at least two of pH, specific conductance and temperature meet the following conditions: successive temperature values measured at least five minutes apart are within one degree Celsius of each other, pH values for two successive measurements measured at least five minutes apart are within 0.2 units of each other, and two successive specific conductance values measured at least five minutes apart are within 10% of each other. This procedure will determine when the wells are suitable for sampling for constituents required by the permit. Other procedures, such as low flow sampling, may be considered by DEQ for approval. The depth to water or static water level shall be measured prior to purging the well.
- G.8 Annual reporting of monitoring requirements is described in Section H, Standard Reporting Requirements.
- G.9 Monitoring locations are described in Section K, Appendix 1, "Environmental Monitoring Serial Numbers".
- G.10 For fields >15 acres, the Permittee shall collect soil samples within each SMU at a minimum of ten random (10) locations. For fields <15 acres, the Permittee shall collect soil samples at five random (5) locations. At each sample location, individual samples must be taken at three depths, 0-12 inches, 12-24 inches, and 24-36 inches (or refusal). Samples from the same depth within a single SMU may be composited by depth to yield a minimum of three (3) samples per SMU for analysis. Sample locations must be spatially representative of the unit; must consider site-specific characteristics such as topography and drainage; and must exclude unusual areas such as erosion channels, dead furrows and fence lines.

Table G-1 Facility Monitoring Table

FREQUENCY	MONITORING POINT	DESCRIPTION AND TYPE OF MONITORING	PARAMETERS
Daily	Each HMU	WW Volume applied	MG and ac-in
Daily	Each HMU	SIW Volume applied	MG and ac-in
Monthly	Active WW Sampling Points in Table K-2	WW Quality (24 hour composite sample)	TKN, NH ₃ -N, NO ₃ -N+NO ₂ -N, P, COD, EC, TDS, VDS, pH, K, SO ₄ , Cl ⁻
Monthly ²	Soil lysimeters – Table K-3	Grab samples of soil water percolate	Volume (mL), temperature, pH, NO ₃ -N, NH ₄ -N, Cl ⁻ , EC, COD, NA, Fe, Mn, Ca, Mg, K, P, SO ₄ , HCO ₃ , CO ₃ , TDS
Quarterly	Active Monitoring Wells in Table K-3	Grab samples of ground water	Water table elevation, water table depth, pH, EC, COD, total P, NH ₄ -N, NO ₃ -N, SO ₄ , Cl ⁻ , total and dissolved Fe, total and dissolved Mn, TDS, VDS, Na, Ca, Mg, K ³
Annually	Domestic wells within ¼ mile of all active treatment acreage ⁴	Grab samples of ground water	Water table elevation, water table depth, pH, , EC, COD, total P, NH ₄ -N, NO ₃ -N, SO ₄ , Cl ⁻ , total and dissolved Fe, total and dissolved Mn, TDS, VDS, Na, Ca, Mg, K ³
Annually	Each HMU	NGS wastewater loading rate	ac-in NGS
Annually	Each HMU	calculate nitrogen loading from WW application	Total N in lb/ac-yr

² Monthly lysimeter sampling and analysis are recommended but not required and are applicable only when MU-003109 (CP-3) is in use.

³ Analytical results are required for dissolved iron and/or manganese only if the results for total iron and/or manganese exceed standards in IDAPA 58.01.11.200.b. Laboratory measured values are required for TDS unless specific approval to use a calculated value (conversion from EC) is obtained.

⁴ Annual domestic well sampling is recommended but not required and applicable only where the owner's permission is obtained.

FREQUENCY	MONITORING POINT	DESCRIPTION AND TYPE OF MONITORING	PARAMETERS
Annually	Each HMU	calculate nitrogen loading from <u>supplemental</u> fertilizer application	Fertilizer N in lbs/ac-yr
Annually	Each HMU	calculate COD loading	COD Applied in lbs/acre-day
Annually (GS) each harvest	Each Crop type, Each Hydraulic Unit	Crop Tissue Analysis <i>or</i> crop nutrient concentration values from standard tables ⁵	Tons/acre, Bu/acre, etc. as appropriate and total yield per HMU (specify moisture basis) -- report NO ₃ -N, crude protein, ash, Cl
Annually (each harvest during the GS)	Each HMU	calculate crop nitrogen/Ash removal	Nitrogen/Ash removed in lbs/acre-yr
One Time (spring 2005)	SIW sampling points in Table K-5	Grab sample of supplemental irrigation water	pH, total P, NH ₄ -N, NO ₃ -N, SO ₄ , Cl ⁻ , total Fe, total Mn, TDS, VDS, Na, Ca, Mg, K
Twice Yearly (pre- and post-growing season)	Each Soil Monitoring Unit	See section note G-10	pH, plant available P, K, NO ₃ -N, NH ₄ -N, SO ₄ , Cl ⁻ , EC
Twice Spring 2005 and 2008	Each soil monitoring unit	See section note G-10	SAR, iron-DTPA, manganese-DTPA

⁵ The Permittee may choose to use values from standard tables for crop nutrient concentration values so long as crop tissue moisture content is within the appropriate range.

H. Standard Reporting Requirements

Section H Notes

- H.1 The Permittee shall complete and submit reports and documentation described in Table H-1 by prescribed due dates unless otherwise agreed to in writing by the Department.
- H.2 No later than January 31 of each year, the Permittee shall submit an Annual Wastewater-Land Application Site Performance Report ("Annual Report"), addressing content requirements in Table H-2. The Annual Report shall cover the previous operating year (November 1 through October 31).
- H.3 The Annual Report shall include an interpretive discussion of monitoring data (ground water, vadose zone, hydraulic loading, wastewater etc.) with particular respect to environmental impacts by the facility and shall be prepared by a competent environmental professional
- H.4 As part of the Annual Report, the Permittee shall submit all laboratory analytical reports for monitoring required or recommended by Table G-1 (including analytical results from sampling conducted at frequencies greater than those prescribed).
- H.5 The Permittee shall submit copies of the annual report to the Department as indicated:

Three (3) copies to:

Engineering Manager or Wastewater Land Application Project Officer
Idaho Department of Environmental Quality
Pocatello Regional Office, 444 Hospital Way, #300
Pocatello, ID 83201 208-236-6160

Table H-1 Reporting Summary Table

REPORT	FORMAT	DATE DUE	CONTENTS
Annual Report	Permittee generated report to include electronic spreadsheet format as provided by DEQ	January 31	As stated in the Annual Report Contents Table in this section
Notice of Completion	Submittal or letter	within 30 days of completion	Compliance activity submittal, compliance activity completion notification letter etc., as appropriate
Notice of Non-Compliance	See Section I, Paragraph 8	See Section I, Paragraph 8	See Section I, Paragraph 8

Table H-2 Annual Report Content Requirements

ANNUAL REPORT CONTENTS TABLE	UNITS
Monthly, seasonal (GS and NGS) and annual WW volumes to each HMU	MG and ac-in
Monthly, seasonal (GS) and annual SIW volumes to each HMU	MG and ac-in
Constituent mass loading to each HMU from WW (nitrogen, plant available phosphorus, potassium, sulfate, COD, salts)	lb/ac-year
Constituent mass loading to each HMU from supplemental fertilizer sources (nitrogen, plant available phosphorus)	lb/ac-year
Laboratory analytical results for monitoring required in Section G, Table G-1	as specified in Section G – Monitoring Requirements
Status of items listed in Section E, Table E-1, Compliance Schedule for Required Activities	written narrative
Description of any actual or potential environmental impacts resulting from the wastewater land application system.	written narrative

I. Standard Permit Conditions: Procedures and Reporting

- 1) The Permittee shall at all times properly maintain and operate all structures, systems, and equipment for treatment, operational controls and monitoring, which are installed or used by the Permittee to comply with all conditions of the permit or the Wastewater-Land Application Permit Regulations, in conformance with a DEQ approved, current Plan of Operations (Operations and Maintenance Manual) which describes in detail the operation, maintenance, and management of the wastewater treatment system. The Permittee shall update the Plan of Operations as necessary to reflect current operations.
- 2) Wastewater(s) or recharge waters applied to the land surface must be restricted to the premises of the application site unless permission has been obtained from the DEQ authorizing a discharge into the waters of the State as stated in IDAPA 58.01.02.600.02.
- 3) Wastewater must not create a public health hazard or nuisance condition as stated in IDAPA 58.01.02.600.03. In order to prevent public health hazards and nuisance conditions the Permittee shall:
 - a) Apply wastewater as evenly as practicable to the treatment area;
 - b) Prevent organic solids (contained in the wastewater) from accumulating on the ground surface to the point where the solids

- putrefy or support vectors or insects; and
- c) Prevent wastewater from ponding in the fields to the point where the ponded wastewater putrefies or supports vectors or insects.
- 4) The Permittee shall:
- Manage the wastewater land application treatment site as an agronomic operation where vegetative cover is grown and harvested or grazed to utilize the nutrients and minerals in the wastewater, and,
 - Not hydraulically overload any particular areas of the wastewater land application treatment site.
- 5) All waste solids, including dredging and sludge materials, shall be utilized or disposed in a manner which will prevent their entry, or the entry of contaminated drainage or leachate therefrom, into the waters of the state such that health hazards and nuisance conditions are not created; and to prevent impacts on designated beneficial uses of the ground water and surface water. The Permittee's management of waste solids shall be governed by the terms of the DEQ approved Waste Solids Management Plan, which upon approval shall be an enforceable portion of this permit.
- 6) If the Permittee intends to continue operation of the permitted facility after the expiration of an existing permit, the Permittee shall apply for a new permit at least six months prior to the expiration date of the existing permit in accordance with the Waste Water Land Application Permit Regulations and include seepage tests on all lagoons per latest DEQ procedures.
- 7) The Permittee shall allow the Director of the Idaho Department of Environmental Quality or the Director's designee (hereinafter referred to as Director), consistent with Title 39, Chapter 1, Idaho Code, to:
- Enter the permitted facility,
 - Inspect any records that must be kept under the conditions of the permit.
 - Inspect any facility, equipment, practice, or operation permitted or required by the permit.
 - Sample or monitor for the purpose of assuring permit compliance, any substance or any parameter at the facility.
- 8) The Permittee shall report to the Director under the circumstances and in the manner specified in this section:
- In writing thirty (30) days before any planned physical alteration or addition to the permitted facility or activity if that alteration or addition would result in any significant change in information that was submitted during the permit application process.
 - In writing thirty (30) days before any anticipated change which would result in non-compliance with any permit condition or these regulations.
 - Orally within twenty-four (24) hours from the time the Permittee became aware of any non-compliance which may endanger the public health or the environment at telephone numbers provided in the permit by the Director (see below)
 - DEQ Regional Office: Pocatello Regional Office: 208-236-6160
 - Emergency 24 Hour Number: 1-800-632-8000
 - In writing as soon as possible but within five (5) days of the date the Permittee knew or should have known of any non-compliance. This report shall contain:
 - A description of the non-compliance and its cause;
 - The period of non-compliance including to the extent possible, times and dates and, if the non-compliance has not been corrected, the anticipated time it is expected to continue; and
 - Steps taken or planned to reduce or eliminate reoccurrence of the non-compliance.
 - In writing as soon as possible after the Permittee becomes aware of relevant facts not submitted or incorrect information submitted, in a permit application or any report to the Director. Those facts or the correct information shall be included as a part of this report.
- 9) The Permittee shall take all necessary actions to prevent or eliminate any adverse impact on the public health or the environment resulting from permit noncompliance.
- 10) The Permittee shall determine (on an on-going basis) if any noxious weed problems relate to the permitted sites. If problems are present, coordinate with the Idaho Department of Agriculture or the local County authority regarding their requirements for noxious weed control. In addition, the Permittee shall address these control operations in an update to the Operations and Maintenance Manual.

J. Standard Permit Conditions: Modifications, Violation, and Revocation

1. The permittee shall furnish to the Director within reasonable time, any information including copies of records, which may be requested by the Director to determine whether cause exists for modifying, revoking, re-issuing, or terminating the permit, or to determine compliance with the permit or these regulations.
2. Both minor and major modifications may be made to this permit as stated in IDAPA 58.01.17.700.01 and 02 with respect to any conditions stated in this permit upon review and approval of the DEQ.
3. Whenever a facility expansion, production increase or process modification is anticipated which will result in a change in the character of pollutants to be discharged or which will result in a new or increased discharge that will exceed the conditions of this permit, or if it is determined by the DEQ that the terms or conditions of the permit must be modified in order to adequately protect the public health or environment, a request for either major or minor modifications must be submitted together with the reports as described in Section I. *Standard Reporting Requirements*, and plans and specifications for the proposed changes. No such facility expansion, production increase or process modification shall be made until plans have been reviewed and approved by the DEQ and a new permit or permit modification has been issued.
4. Permits shall be transferable to a new owner or operator provided that the permittee notifies the Director by requesting a minor modification of the permit before the date of transfer.
5. Any person violating any provision of the Wastewater Land Application Permit Regulations, or any permit or order issued thereunder shall be liable for a civil penalty not to exceed ten thousand dollars (\$10,000) or one thousand dollars (\$1,000) for each day of a continuing violation, whichever is greater. In addition, pursuant to Title 39, Chapter 1, Idaho Code, any willful or negligent violation may constitute a misdemeanor.
6. The Director may revoke a permit if the permittee violates any permit condition or the Wastewater Land Application Permit Regulations.
7. Except in cases of emergency, the Director shall issue a written notice of intent to revoke to the permittee prior to final revocation. Revocation shall become final within thirty-five (35) days of receipt of the notice by the permittee, unless within that time the permittee request an administrative hearing in writing to the Board of Environmental Quality pursuant to the Rules of Administrative Procedures contained in IDAPA 58.01.23
8. If, pursuant to Idaho Code 67-5247, the Director finds the public health, safety or welfare requires emergency action, the Director shall incorporate findings in support of such action in a written notice of emergency revocation issued to the permittee. Emergency revocation shall be effective upon receipt by the permittee. Thereafter, if requested by the permittee in writing, a revocation hearing before the Board of Environmental Quality shall be provided. Such hearings shall be conducted in accordance with the Rules of Administrative Procedures contained in IDAPA 58.01.23.
9. The provisions of this permit are severable and if a provision or its application is declared invalid or unenforceable for any reason, that declaration will not affect the validity or enforceability of the remaining provisions.
10. The permittee shall notify the DEQ at least six (6) months prior to permanently removing any permitted land application facility from service, including any treatment, storage, or other facilities or equipment associated with the land application site. Prior to commencing closure activities, the permittee shall: a) participate in a pre-site closure meeting with the DEQ; b) develop a site closure plan that identifies specific closure, site characterization, or cleanup tasks with scheduled task completion dates in accordance with agreements made at the pre-site closure meeting; and c) submit the completed site closure plan to the DEQ for review and approval within forty-five (45) days of the pre-site closure meeting. The permittee must complete the DEQ approved site closure plan.

K. Appendices

1. Environmental Monitoring Serial Numbers

Section K Notes:

K-1. Hydraulic and Soil Management Units, indicated with an asterisk in Tables K-1 and K-4 respectively, represent pivots “*yet-to-be-developed*” at the Pratt location and are included herein for informational purposes only. Following development, the Permittee may use these pivots for wastewater-land application only with prior, written approval from the Department.

Table K-1 Hydraulic Management Units

HYDRAULIC MANAGEMENT UNITS				
<i>Original Area Current Configuration</i>				
WLAP Serial Number	Simplot-Aberdeen ID	Former ID	Active?	Acres
MU-003109	CP-3	Field 6	☒	28.78
MU-003117	CP-8	CP-1, CP-2	☒	77.52
MU-003118	CP-9a, CP-9b	CP-4, WL3	☒	34.29
MU-003119	CP-10a, CP-10b	WL2, 4; CP-4	☒	78.84
MU-003120	Corners North	Various	☒	22.74
MU-003121	Corners South	Various	☒	17.51
Original Location Sub-total				259.68
<i>Knudsen Expansion Area Current Configuration</i>				
WLAP Serial Number	Simplot-Aberdeen ID		Active?	Acres
MU-003114	CP-5		☒	55.7
MU-003115	CP-6		☒	70.83
MU-003116	CP-7		☒	56.98
Knudsen Location Sub-total				183.51
<i>Pratt Expansion Area Current Configuration</i>				
WLAP Serial Number	Simplot-Aberdeen ID		Active?	Acres
MU-003122	CP-1P		☒	121.5
MU-003123	CP-2P		☒	121.5
MU-003124	CP-3P		☒	121.5
MU-003125	CP-4P		☒	121.5
MU-003126	CP-5P		☒	121.5
MU-003127	CP-6P		☒	121.5

Pratt Expansion Area Current Configuration

WLAP Serial Number	Simplot-Aberdeen ID	Active?	Acres
MU-003128	CP-7P	<input checked="" type="checkbox"/>	121.5
MU-003129*	CP-8P*	<input type="checkbox"/>	121.5
MU-003130*	CP-9P*	<input type="checkbox"/>	121.5
MU-003131*	CP-10P*	<input type="checkbox"/>	91
MU-003132*	CP-11P*	<input type="checkbox"/>	121.5
MU-003133*	CP-12P*	<input type="checkbox"/>	61
MU-003134*	CP-13P*	<input type="checkbox"/>	61
Pratt Expansion Area Sub-total Phase 1 (Active)			850.5
Total Acres			1293.7

Table K-2 Wastewater Sampling Points

WLAP Serial Number	Description of Sampling Location	Active?
WW-003101	WW composite downstream from wastewater treatment	<input checked="" type="checkbox"/>

Table K-3 Ground Water Sampling Points

WLAP Serial Number	Common Name	Description/Gradient Position	Active?
GW-003101	MW-1	Original Site, Upgradient to CP-9a	<input checked="" type="checkbox"/>
GW-003102	MW-2	Original Site, Upgradient to CP-8	<input checked="" type="checkbox"/>
GW-003103	MW-3	Original Site, Upgradient to CP-3, Side gradient to CP-8	<input checked="" type="checkbox"/>
GW-003104	MW-4	Original Site, Sidegradient to CP-8	<input type="checkbox"/>
GW-003105	MW-5	Original Site, Downgradient from CP-8	<input checked="" type="checkbox"/>
GW-003106	MW-6	Original Site, Mid-field in CP-8	<input type="checkbox"/>
GW-003107	MW-7	Original Site, Upgradient to CP-9a/10b	<input checked="" type="checkbox"/>
GW-003108	MW-8	Original Site, Upgradient to CP-10b	<input type="checkbox"/>
GW-003109	MW-9	Original Site, Upgradient to CP-10b	<input type="checkbox"/>
GW-003110	MW-10	Original Site, Sidegradient to CP-10b	<input checked="" type="checkbox"/>

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WLAP Serial Number	Common Name	Description/Gradient Position	Active?
GW-003111	MW-11	Original Site, Downgradient to CP-10b	<input checked="" type="checkbox"/>
GW-003112	MW-12	Original Site, Downgradient to CP-10b	<input checked="" type="checkbox"/>
GW-003113	MW-13 (old)	Original Site, Downgradient from CP-3	<input type="checkbox"/>
GW-003114	MW-13S	Original Site, Downgradient to CP-3	<input checked="" type="checkbox"/>
GW-003115	MW-13D	Original Site, Downgradient to CP-3	<input checked="" type="checkbox"/>
GW-003116	MW-8a	Original Site, Upgradient to CP-10b	<input checked="" type="checkbox"/>
GW-003117	MW-14	Knudsen Site, Upgradient to CP-5	<input checked="" type="checkbox"/>
GW-003118	MW-15	Knudsen Site, Sidegradient to CP-5	<input checked="" type="checkbox"/>
GW-003119	MW-16	Knudsen Site, Downgradient to CP-5 and CP-6	<input checked="" type="checkbox"/>
GW-003120	MW-17	Knudsen Site, Downgradient to CP-5	<input checked="" type="checkbox"/>
GW-003121	MW-18	Knudsen Site, Downgradient to CP-7	<input checked="" type="checkbox"/>
GW-003122	MW-19	Knudsen Site, Upgradient to CP-6 and CP-7	<input checked="" type="checkbox"/>
GW-003123	MW-1P	Pratt Site, Upgradient to CP-6P	<input checked="" type="checkbox"/>
GW-003124	MW-2P	Pratt Site, Upgradient to CP-7P	<input checked="" type="checkbox"/>
GW-003125	MW-3P	Pratt Site, Upgradient to CP-9P	<input checked="" type="checkbox"/>
GW-003126	MW-4P	Pratt Site, Upgradient to CP-1P, Downgradient from CP-5P	<input checked="" type="checkbox"/>
GW-003127	MW-5P	Pratt Site, Downgradient from CP-3P	<input checked="" type="checkbox"/>
GW-003128	MW-6P	Pratt Site, Downgradient from CP-3P	<input checked="" type="checkbox"/>
GW-003129	MW-7P	Pratt Site, Downgradient from CP-10P	<input checked="" type="checkbox"/>

Table K-4 Soil Monitoring Units

SOIL MANAGEMENT UNITS				
<i>Original Area Current Configuration</i>				
WLAP Serial Number	Simplot-Aberdeen ID	Associated HMU	Active?	Acres
SU-003109	CP-3	MU-003109	<input checked="" type="checkbox"/>	28.78
SU-003117	CP-8	MU-003117	<input checked="" type="checkbox"/>	77.52
SU-003118	CP-9a & CP-9b	MU-003118	<input checked="" type="checkbox"/>	34.29

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SOIL MANAGEMENT UNITS

SU-003119	CP-10a & CP-10b	MU-003119	<input checked="" type="checkbox"/>	78.84
SU-003120	Corners North	MU-003120	<input checked="" type="checkbox"/>	22.74
SU-003121	Corners South	MU-003121	<input checked="" type="checkbox"/>	17.51
Original Location Sub-total				259.68

Knudsen Expansion Area Current Configuration

WLAP Serial Number	Simplot-Aberdeen ID	Associated HMU	Active?	Acres
SU-003114	CP-5	MU-003114	<input checked="" type="checkbox"/>	55.7
SU-003115	CP-6	MU-003115	<input checked="" type="checkbox"/>	70.6
SU-003116	CP-7	MU-003116	<input checked="" type="checkbox"/>	58.98
Knudsen Location Sub-total				185.28

Pratt Expansion Area Current Configuration

WLAP Serial Number	Simplot-Aberdeen ID	Associated HMU	Active?	Acres
SU-003122	CP-1P	MU-003122	<input checked="" type="checkbox"/>	121.5
SU-003123	CP-2P	MU-003123	<input checked="" type="checkbox"/>	121.5
SU-003124	CP-3P	MU-003124	<input checked="" type="checkbox"/>	121.5
SU-003125	CP-4P	MU-003125	<input checked="" type="checkbox"/>	121.5
SU-003126	CP-5P	MU-003126	<input checked="" type="checkbox"/>	121.5
SU-003127	CP-6P	MU-003127	<input checked="" type="checkbox"/>	121.5
SU-003128	CP-7P	MU-003128	<input checked="" type="checkbox"/>	121.5
<i>SU-003129*</i>	<i>CP-8P</i>	<i>MU-003129*</i>	<input type="checkbox"/>	121.5
<i>SU-003130*</i>	<i>CP-9P</i>	<i>MU-003130*</i>	<input type="checkbox"/>	121.5
<i>SU-003131*</i>	<i>CP-10P</i>	<i>MU-003131*</i>	<input type="checkbox"/>	91
<i>SU-003132*</i>	<i>CP-11P</i>	<i>MU-003132*</i>	<input type="checkbox"/>	121.5
<i>SU-003133*</i>	<i>CP-12P</i>	<i>MU-003133*</i>	<input type="checkbox"/>	61
<i>SU-003134*</i>	<i>CP-13P</i>	<i>MU-003134*</i>	<input type="checkbox"/>	61

Pratt Expansion Area Sub-total Phase 1 (Active)

850.5

Total Active Acres

1293.7

Table K-5 Supplemental Irrigation Water Sampling Points

WLAP Serial Number	Common Name	Description/Gradient Position	Active?
GW-003130	Knudsen Well	na	<input checked="" type="checkbox"/>
GW-003131	Pratt Well-1	na	<input type="checkbox"/>
GW-003132	Pratt Well-2	na	<input checked="" type="checkbox"/>
GW-003133	Pratt Well-3	na	<input checked="" type="checkbox"/>
GW-003134	Pratt Well-11	na	<input checked="" type="checkbox"/>
GW-003135	Pratt Well-12	na	<input type="checkbox"/>

Table K-6 Lysimeter Sampling Points

WLAP Serial Number	Common Name	Description	Active?
LY-003101	CP3-1	Lysimeter on CP-3	<input checked="" type="checkbox"/>
LY-003102	CP3-2	Lysimeter on CP-3	<input checked="" type="checkbox"/>
LY-003103	CP3-3	Lysimeter on CP-3	<input checked="" type="checkbox"/>
LY-003104	CP3-4	Lysimeter on CP-3	<input checked="" type="checkbox"/>
LY-003105	CP3-5	Lysimeter on CP-3	<input checked="" type="checkbox"/>

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2. Site Maps